UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,155	11/05/2001	Modesto Tabares	9209-10	5291

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ART UNIT	PAPER NUMBER
2194	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/992,155	TABARES ET AL.
	Examiner	Art Unit	
	Diem K. Cao	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _02 April 2007_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-15, 20-34 and 39-53_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-15, 20-34 and 39-53_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-15, 20-34 and 39-53 are pending.

2.   In view of the Appeal Brief filed on 4/2/2007, PROSECUTION IS HEREBY

REOPENED. A new ground of rejection is set forth below.

        To avoid abandonment of the application, appellant must exercise one of the following

two options:

        (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37

CFR 1.113 (if this Office action is final); or,

        (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental

appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other

evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

        Claims 20-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed

to non-statutory subject matter.

        Claims 20 and 31 are directed to computer programs, i.e., software per se, which are not

physical "things". Although the claims claim the "system", and "means for" in this instant

application is software per se, i.e., computer instructions (page 9, lines 10-12). They are neither

computer components nor statutory processes, as they are not "acts" being performed. Such

claimed computer programs do not define any structural and functional interrelationships

between the computer program and other claimed elements of a computer which permit the

computer program's functionality to be realized. In contrast, a claimed storage computer-

readable medium encoded with a computer program is a computer element which defines

structural and functional interrelationships between the computer program and the rest of the

computer which permit the computer program's functionality to be realized, and is thus statutory.

Claims 21-30 and 32-34 fail to remedy the deficiencies of claims 20 and 31 above, and

therefore are rejected under the same ground of rejection.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   **Claims 1, 2, 10, 12, 13, 15, 20, 21, 29, 31, 32, 34, 39, 40, 48, 50, 51 and 53 are rejected**

under 35 U.S.C. 102(e) as being anticipated by Camara et al (U.S. 2002/0059474 A1).

As to claim 1, Camara teaches dynamically associating a first software component (driver

script) with the device driver (The Scanner Scripting Driver) at run-time (The Scanner Scripting

Driver 120 uses the ... driver script 96 at runtime to operate the scanner; page 4, paragraph 34

and page 3, paragraph 22), the first software component containing information that facilitates

communication with devices of a specific device type (functions that can be called by the driver

script to communicate with and control the hardware device; page 3, paragraph 21 and the

device-specific aspects of communicating with and controlling a hardware device are handled by

a driver script for that device; page 4, paragraph 32).

As to claim 2, Camara teaches defining a plurality of device parameters (page 4,

paragraph 36 and page 9, examples 2-4), associating at least one of the plurality of device

parameters with a service (page 9, examples 2-4), and communicating the at least one of the

plurality of device parameters associated with the service to the device driver (page 4, paragraph

34).

As to claim 10, Camara teaches selecting the first software component from a plurality of

software components, respective ones of the plurality of software components being associated

with respective ones of a plurality of device types (see fig. 2 and pages 2-3, paragraph 20).

As to claim 12, see rejection of claim 1 above. Camara further teaches receiving a request

to collect data from the device (page 3, paragraph 27), retrieving data from the device using the

device driver (page 3, paragraph 28).

As to claim 13, Camara teaches associating at least one device parameter with a service

(page 4, paragraph 36 and page 9, examples 2-4), communicating the at least one device

parameter to the device driver (page 4, paragraph 34), and retrieving data associated with the at least one device parameter from the device (page 3, paragraph 28).

As to claim 15, see rejection of claim 10 above.

As to system claim 20, it is the same as the method claim of claim 1 and is rejected under the same ground of rejection.

As to claim 21, see rejection of claim 2 above.

As to claim 29, see rejection of claim 10 above.

As to claim 31, it is the same as the method claim 12 and is rejected under the same ground of rejection.

As to claims 32 and 34, see rejections of claim 13 and 15.

As to computer product claim 39, it is the same as the method claim of claim 1 and is rejected under the same ground of rejection.

As to claims 40 and 48, see rejections of claims 2 and 10 above.

As to claim 50, it is the same as the method claim 12 and is rejected under the same ground of rejection.

As to claims 51 and 53, see rejections of claims 13 and 15 above.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   **Claims 9, 14, 28, 33, 47 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camara et al (U.S. 2002/0059474 A1) in view of Martin et al (Professional XML).**

As to claim 9, Camara teaches the first software component comprises one of a script file (page 4, section 0036). Camara does not teach an extensible markup language. However, Martin teaches the advantage of xml when sharing information (page 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Camara and Martin because XML language is open, and its self-describing nature makes it an effect choice for multiple solutions (page 12).

As to claims 14, 28, 33, 47 and 52, see rejection of claim 9 above.

8.   **Claims 3-5, 22-24 and 41-43 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Camara et al (U.S. 2002/0059474 A1) in view of Kreissig et al (U.S.

6,473,824 B1).

As to claim 3, Camara does not teach the claimed limitations. However, Carama suggests

the first software component could be written in programming language (page 5, paragraph 38).

Kreissig teaches declaring a parameter base class that defines the plurality of device parameters

(class IOLine 503, the parent class for a digital line; col. 8, lines 14-15 and 20-21), deriving a

service-specific sub-class from the base class that defines the at least one of the plurality of

device parameters that are associated with the service (IOLineIn, IOLineOut; col. 8, lines 11-15

and 20-21), instantiating the service-specific sub-class to create a service-specific sub-class

object (Whenever an IO domain object … instantiated; col. 9, lines 56-58), and instantiating the

parameter base class to create a parameter base class object (Whenever an IO domain object …

instantiated; col. 9, lines 56-58). It would have been obvious to one of ordinary skill in the art at

the time the invention was made to combine the teaching of Camara and Kreissig because it

provides a flexible, object-oriented approach for establish communication links between an

application program and various IO device drivers (col. 2, lines 35-38).

As to claim 4, Kreissig teaches passing the at least one of the plurality of device

parameters associated with the service from the service-specific sub-class object to the device

driver (col. 9, lines 12-22).

As to claim 5, Kreissig teaches defining a plurality of common device parameters (class

IOLine 503, the parent class for a digital line; col. 8, lines 14-15 and 20-21), defining a plurality

of service-specific device parameters (IOLineIn, IOLineOut; col. 8, lines 11-15 and 20-21),

associating the common device parameters with the service-specific device parameters (the

domain class ... for a digital line; col. 8, lines 13-15 and 20-21), and communicating the

common device parameters and the service-specific device parameters to the device driver (col.

9, lines 13-22).

As to claims 22-24, see rejections of claims 3-5 above.

As to claims 41-43, see rejections of claims 3-5 above.

9.   **Claims 11, 30 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

Camara et al (U.S. 2002/0059474 A1) in view of Ramberg et al (U.S. 2005/0034029 A1).

As to claim 11, Camara does not teach generating the plurality of software components

based on a plurality of management information base files, respective ones of the plurality of

MIB files being associated with respective ones of the plurality of device types. However,

Ramberg teaches the MIB describes and provides management information for device (page 4,

section 0039 and page 5, section 0049). It would have been obvious to one of ordinary skill in

the art at the time the invention was made to combine the teaching of Camara and Ramberg

because it provides a method to create the component based on existing information instead from

scratch which will save time and resources.

As to claims 30 and 49, see rejection of claim 11 above.

10.   Claims 6, 25 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Camara et al (U.S. 2002/0059474 A1) in view of Kreissig et al (U.S. 6,473,824 B1) further in

view of Martin et al (Professional XML).

As to claim 6, Camara teaches the software component that comprises a device script

written in any type of script language that includes two files, one is device model data file and

the other is a device family data file (page 4, paragraph 0036). However, Kreissig teaches

declaring a parameter base class that defines the plurality of common device parameters (class

IOLine 503, the parent class for a digital line; col. 8, lines 14-15 and 20-21), wherein defining

the plurality of service-specific device parameters comprises providing a second software

component (IOLineIn, IOLineOut; col. 8, lines 11-15 and 20-21), and instantiating the parameter

base class to create a parameter base class object (Whenever an IO domain object ...

instantiated; col. 9, lines 56-58). Martin teaches the advantage of xml when sharing information

(page 12). It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teaching of Kreissig, Camara and Martin because it provides a flexible,

object-oriented approach for establish communication links between an application program and

various IO device drivers (col. 2, lines 35-38).

Response to Arguments

11. Applicant's arguments filed 4/2/2007 have been fully considered but they are not persuasive.

The prosecution is re-opened to address 101 issues that were not raised before, and the art rejection is maintained.

In the arguments filed on 4/2/2007, Applicant argued in substance that (1) Camara does not disclose or suggest the software component that is dynamically associated with the device driver at run time and facilitates communication with the device as recited in the independent claims (page 9, lines 11-14) because the scripting driver 120 is permanently associated with the driver script 96 (page 9, line 21- page 10, line 12).

Examiner respectfully disagrees with the arguments:

- As to the point (1), Camara teaches a system that includes a generic driver for a device type, for example, devices falling in the category of "image capturing devices", such as scanners and digital cameras, the generic scripting driver is provided by the system-supplied (page 2, paragraph 20 and page3, paragraphs 23-24), and multiple driver scripts each for a particular hardware device (page 2, paragraph 20), the driver script is provided by the vendor of the associated hardware device (page 3, paragraph 24). At runtime, base on the request for the device, the generic scripting driver would access and execute a portion of driver script that is associated with the device (pages 2-3, paragraph 20). Clearly, Camara teaches "dynamically associating a first software component with the device driver at run-time" as recited in the claims. Furthermore, just based on Fig. 3 and

asserted that the software component and the driver is permanently associated, the instant

application would also fall in to the same situations, i.e., the driver and the software

component are provided in the system. Therefore, the arguments are not persuasive and
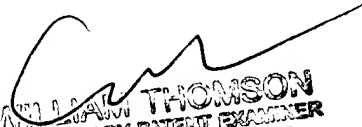
the rejection is maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The

examiner can normally be reached on Monday - Friday, 7:30AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC